REMARKS

This is intended as a full and complete response to the Office Action dated May 31, 2007, having a shortened statutory period for response set to expire on August 31, 2007. Claims 6-8 and 14-24 have been examined.

Claim Rejections Under 35 U.S.C. § 103(a)

The Examiner rejected claims 6-8 and 14-24 under 35 U.S.C. § 103(a) as being obvious over Kohnke (US 6,221,566). Applicant respectfully traverses the rejection.

MPEP § 2143 clearly sets forth that all claim limitations must be taught or suggested by the prior art to establish *prima facie* obviousness of a claimed invention. See In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). As admitted by the Examiner in the Office Action, Kohnke fails to specifically teach the step of measuring an optical signal response from the waveguide or the step of heating a section to reduce the increase in the section or the step of repeating the measuring and heating step until the desired optical signal response is achieved. The Examiner further states in the Office Action that it is common knowledge in the art to measure the optical signal and that the prior art method of heating/annealing is the same step as claimed. Applicant respectfully disagrees with the Examiner's contentions and respectfully submits that it is not common knowledge to induce an increase in refractive index in a portion of a waveguide, measure an optical signal response from the waveguide, heat a localized section of the portion to reduce the increase in the section if the optical signal response is not the desired optical signal response and then repeat the measuring step and the heating step until the desired optical signal response is achieved. In accordance to MPEP 2144.03, Applicant respectfully requests that the Examiner produce authority and/or documentary evidence to support the Examiner's assertion of common knowledge.

Moreover, the annealing step in <u>Kohnke</u> is used to diffuse the gas from the loaded optical waveguide and to stabilize the change in refractive index. A fair reading of <u>Kohnke</u> shows a method of enhancing the photosensitivity of an optical waveguide by loading the optical waveguide with a gas, treating a portion of the loaded optical guide, utilizing a fiber Bragg grating device, and then annealing the optical waveguide (<u>see Kohnke</u>, col. 5, lines 35-45). There is no mention in <u>Kohnke</u> of a reiterative process of measuring and heating until the desired

optical signal response is achieved. Further, the Examiner must identify a reason that would have prompted a person of ordinary skill in the relevant art to combine the elements in the manner claimed. See KSR International Co. v. Teleflex Inc., No. 04-1350, slip op. at 14 (U.S. April 30, 2007). Therefore, the Examiner has used impermissible hindsight to render the claims obvious.

As the foregoing illustrates, <u>Kohnke</u> fails to render claims 6 and 18 obvious. Therefore, Applicant respectfully requests the 103(a) rejection of claims 6 and 18 be removed and the allowance of the same. Additionally, since claims 7-8 and 14-17 depend from claim 6 and claims 19-24 depend from claim 18, these claims are allowable for at least the same reasons as claims 6 and 18.

New Claims

New claims 25-29 have been added to claim aspects of the present invention. Applicant submits that no new subject matter has been added. Applicant believes that Kohnke fails to disclose a method of altering an optical waveguide to achieve a desired optical signal response from said waveguide comprising the steps of inducing an increase in refractive index in a portion of said waveguide, measuring an optical signal response from said waveguide to determine if said optical signal response is the desired optical signal response, heating a localized section of said portion to reduce said increase in said section in response to said measuring the optical signal response, measuring a further optical signal response from said waveguide, and heating a localized section of said portion to reduce said increase in said section in response to said measuring the further optical signal response if said further optical signal response is not the desired optical signal response as recited in new claims 25-29. Therefore, Applicant believes that new claims 25-29 are in condition for allowance and respectfully request the same.

Conclusion

Having addressed all issues set out in the office action, Applicant respectfully submits that the case is in condition for allowance. If the Examiner has any questions, please contact the Applicant's undersigned representative at the number provided below.

Respectfully submitted,

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